KNOWLEDGE AND PRACTICE OF PERSONAL HYGIENE AMONG SECONDARY SCHOOL STUDENTS IN ENUGU STATE

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Abstract
In academic sector, they are high rate of infectious diseases like measles, diarrhea, coronavirus, monkey-pox, skin disease and genital infections, the occurrence of these infectious diseases came as a result of students' negligence in practicing of personal hygiene. Therefore, this study examined knowledge and practice of personal hygiene among secondary school students in Enugu State. Two specific purpose and research questions guided the study. Descriptive survey research design was adopted for the study. The population for the study consisted of 9900 secondary school students in Enugu State. 495 students made up the sample for this study. The researcher used simple random sampling technique. Specifically the reliability coefficients obtained from data generated with Statistical Package for Social Sciences (SPSS) using Kuder Richardson formula and Cronbach's alpha reliability for the internal consistency reliability, shows knowledge of personal hygiene (.85) and practice of personal hygiene (.79) respectively. A 22-items structured questionnaire tagged "Knowledge and Practice of Personal Hygiene Questionnaire (KPPHQ)" was used for data collection. The data collected were analyzed using frequency, percentage, mean and standard deviation. The questionnaire was rated on 4-point scale of very great extent (VGE), great extent (GE), low extent (LE) and very low extent (VLE). The decision rule was that any item that has 50% and above is regarded as knowledgeable (K) while items below 50% is regarded as not knowledgeable (NK). For the personal hygiene, any item mean from 2.50 above is regarded as high while items mean below 2.50 is regarded as low. The findings showed that, majority of students have adequate knowledge of personal hygiene with the grand percentage of (69.8%) and low practice of personal hygiene with the grand mean of (2.0). The study conclude that: students are very knowledgeable of personal hygiene, but putting their knowledge into physical practice are seen as the major problems that most students face, which usually contribute to the risk of infectious diseases such as covid-19, genital infections, dental health challenges and diarrhea. The study recommend that students' knowledge as it regards to personal hygiene practice should always be appraised by the classroom teacher, for the purpose of motivating those ones that have low knowledge of personal hygiene and the school management should provide all the prerequisite personal hygiene materials for the facilitation of its practice.

Keywords: Personal hygiene, practice, knowledge and students.

Introduction

Good health is one of the desires of human beings and one of the essential individual practices that contribute immensely to health promotion is personal hygiene practices. On the contrary, negligence on the practice of personal hygiene by students may adversely affect the students' health state which may as well lead to contraction of infectious diseases from one student to another and this may increase the rate of truancy in school. Nevertheless, the emergence of coronavirus, monkey-pox, measles and chicken-pox came as a result of poor knowledge and practice of personal hygiene by majority of students. According to Loughlin (2016), personal hygiene are measures taken at individual level to promote personal cleanliness so that transmission of diseases from source to susceptible hosts is prevented. Ahmadu (2013), defines personal hygiene as those personal care practiced by individual which may include keeping our body, our teeth, our hair, our clothes and our genital area clean in order to combat germs on the body that could lead to illness. The author adds that personal hygiene is a complex process which combines various practices aimed at achieving cleanliness through personal action, dedication and personal commitment towards keeping the body healthy.

The behavior aimed at achieving cleanliness and requires repeated personal action, dedication, commitment is known as personal hygiene practices. Hygiene practice refers to the habitual way of doing something consistently. Ali, Rahman and Siddiqui (2013), defines personal hygiene practices as the practice of maintaining cleanliness through regular health practice such as; washing hands with soap and water before meals and after defecating, brushing of teeth twice daily, regular taking of bath with soap and water, keeping nails short and regular exercise. This submissions highlights that personal hygiene practices does not only mean the health restricted to individual body, rather it may also constituted those health practice within our home environment. Similarly, Kumie, (2015), Lalani, (2015) and Lukacs (2016), defines personal hygiene practice as a practical approach towards regular hygiene practice which comes as a result of sufficient knowledge with regards to personal and environmental health. This shows that the regular compliance to these personal hygiene practices may lead to promotion of health, prevention of communicable diseases and improvement of individual physical beauty. No wonder, WHO (2023), opines that having knowledge of personal hygiene may lead to regular hygienic practices which will positively enhance the state of health individually and the society at large, while poor knowledge of personal hygiene practice is a risk factor that may lead to increase in spread of communicable diseases such as coronavirus, monkey pox, chicken pox and measles

Ali, Rahman and Siddiqui (2013) highlighted some of the major components of personal hygiene, which include body hygiene (skin care), oral hygiene (oral care), hand washing (hand care), face hygiene, fingernail and toe nail hygiene (nail care), ear hygiene, hair hygiene, foot hygiene, arm pit and bottom hygiene, clothes hygiene and menstrual hygiene. According to him, several studies show that personal hygiene practices is not limited to its component rather it also include seeing a doctor, seeing a dentist, regularly

washing (bathing or showering) of the body, regular hand washing, brushing and flossing of teeth, basic manicure and pedicure, feminine hygiene and healthy eating.

However, personal hygiene practices have been noted as one of the cost-effective measures for prevention of infectious disease including COVID-19. Sekhon and Minhas, (2014), Center for Disease Control and Prevention Coronavirus (2013) WHO (2009) and Mohammed (2015), in their own conceptualization stated that, Infectious diseases can easily be contracted among school children due to overcrowded environment and inappropriate poor personal hygiene practices of the students. As a result, most students get sick, skip school and lessons and it affects their academic performance. Their reports find out that, parents spend a lot of money in hospital to treat their children from infectious diseases, and most often their students might contact infectious diseases from the school and then spread it to the family members which in turn makes the family members spending a lot of money for treatment and as well as being susceptible of risk of contracting COVID-19 or other related infectious diseases. The findings proved that, the main ways by which infectious are been contracted by students are due to overcrowded of students in their school facilities. Which this over population of students, lead to risk of infectious diseases and as well contributed to parental economic loss of money in buying of medicine for treatment of the infected child. Therefore practicing of these personal hygienic act, comes as a result of having adequate knowledge regards to it.

In addition to that, World Health Organization (WHO, 2023), confirmed on the essence of hand hygiene, by making it known to us that hand hygiene compliance is recommended as one of the key performance indicators for infection prevention and control program, patient safety and quality of health services worldwide. They also added that, appropriate knowledge and practice of hand hygiene, prevents up to 50% of avoidable infections, acquired during health care delivery, including those affecting the health work force, appropriate knowledge and practice of hand hygiene also reduces the risk on SARS-CoV-2 - the virus that causes COVID-19 - infection among health workers.

Pati, Kadam, and Chauhan (2014), reported that, hand washing with soap and clean water reduces morbidity by 44% and respiratory infections by 23%. Their report have the view that, globally, 88% of diarrhea related deaths are associated with use of unsafe water, inadequate sanitation and poor hygiene practices. Similarly, Ilesanmi (2016), stated that, a study carried out on adolescent and adult dental health, shows that oral health problems was one of the major health problems been faced by our young children and adolescents, with high percentage of 30% and 43% among Nigerians, aged 12 and 15 years, respectively, Ilesanmi (2016). Therefore, there is need for an urgent awareness of the essence of personal hygiene knowledge and practice because knowledge influences people health, through basic education and public knowledge individuals become aware of the meaning of self-protection and personal hygiene. Therefore, this study wishes to examine the knowledge and practice of personal hygiene among students in Enugu State. Hussain, Hasan, Khan, Arsalan and Tabassum (2014) contribute that good oral hygiene is an evidence for good body health, while poor oral

hygiene not only affect the oral cavity but also a risk factor for initiation of many systemic diseases. The presence of dental plaque is an evidence of poor oral hygiene, which if not treated might lead to dental calculus which will further deteriorate the situation. Environmental factors such as culture, socioeconomic status, life style and diet pattern might negatively influence oral health maintenance. Beril, Füsun and Gülten (2017), on their previous report showed that 52.4% of visual-disabled women did not receive information about genital hygiene; 33.4% received information about menstrual hygiene; 34.6% received information about vaginal discharge; 38.1% had urinary tract infection; 79.8% did not go to a doctor periodically. This shows that, there are urgent need for adequate practicing of vagina health among women in order to curtail the prevalence of poor practice of unhealthy vagina hygienic practice.

Knowledge and practice are essential for actualization of a predetermined goal, therefore in order to carry out personal hygiene practice, there are need for adequate knowledge and practice. Haradanahalli, Ramya and Nitu (2019), defines hygiene as a conditions and practices that encourages maintenance of health and prevention of spread of disease. In addition, personal hygiene practices are one of the health practice in our everyday lives at schools, offices, market places and homes as it protects us from contamination of infectious diseases and keeping us with good health. That is why, personal hygiene involves the total cleaning of personal body, clothing and regular exercising of environmental sanitation for the prevention of spread of infectious diseases. Haradhan, Kumar and Mohajan (2016), opined that knowledge is a fluid mix of experience, related information and expert insight that offers a structure for evaluating and integrating new experiences and information. It initiates and is applied in the mind of a knower. Therefore, knowledge is considered as a collection of experience, appropriate information and skilled insight which offers a structure for estimating and integrating new experiences and information. In this study, knowledge of personal hygiene can be seen as an act of personal awareness on the impact of personal hygiene in the body. In the view of Vivas (2019), the prevalence of communicable diseases in developing countries especially among school children may be as a result of lack of adequate knowledge on the health benefits of personal hygiene. Therefore, in order to curtail the prevalence of communicable diseases among school children there is need for adequate practicing of personal hygiene in school.

Practice is the process of actualization of predetermined goal, through an active approach. According to kjeld (2014), practice is defined as an active process of doing or performing something which has a starting point and end point. Which now indicate that, engaging into a practical process of personal hygiene, deals with active performance of the individual. The author also opined that knowledge and practice toward individual personal hygiene practice, connote with a cognitive and psychomotor approach of ensuring proper personal health being. But in a situation where by an individual lags adequate knowledge and practice regards to personal hygiene practice, might negatively

influence his good health. Nevertheless, this study is anchored on a theory that is related to the current study.

Health Belief Theory (HBT), was developed to predict health behaviors. This model propounded that, the willingness to change health behaviours is primarily based on health perceptions. Therefore, this model is a tool that most scientists use to try and predict health behaviours. This model was developed in 1950's by Irwin M. Kosenstock, Godfrey M, Hockbaum S, Stephen Kegeles and Howard Leventhal at the U.S public health. The theoretical construct of health belief model includes; perceived severity, perceived susceptibility, perceived benefits, perceived barriers, modifying variables, cue to action and self-efficacy. This theory is related to the current study because, through the knowledge emanating from this theory will serve as a guide to students on a proper ways of ensuring adequate practicing of personal hygiene for the prevention of communicable diseases. Also through this theory, students' knowledge will be enhance which may lead to knowledge gain on the implication related to negligence of practicing of personal hygiene.

Statement of the Problem

The occurrence of communicable disease among secondary school students at Enugu State was as a result of poor knowledge and practice of personal hygiene, which leads to contraction of infectious diseases like measles, chicken pox, covid-19, monkey pox and diarrhea warranted the only. During school hours majority of students have been seen neglecting adequate practice of personal hygiene, such as appropriate washing of hands before eating of snacks, sharing of school uniform with his fellow students, putting sharp object in their ears, putting dirty fingers in their mouth, bathing without soap, rubbing dirty finger in their eyes, cutting their finger nails with either their teeth or with their friends sharp object. The researcher also observed that students' poor practice on personal hygiene may be as a result of students' negligence on their personal hygiene as well as their inability to put their knowledge on personal hygiene into action.

The researcher was worried that these problem mentioned above might prevent student from living a healthy life. Therefore this study seek to answer the question on the knowledge and practice of personal hygiene among secondary school students at Enugu State?

Purpose of the Study

The purpose of this study dealt with the knowledge and practice of personal hygiene among secondary school students in Enugu State. Specifically the study sought to;

1. Find out the level of knowledge of personal hygiene practices among secondary school students in Enugu State.
2. Find out the extent of practice of personal hygiene among secondary school students in Enugu State.

Research Questions

The following research question guided the study:

1. What is the level of knowledge of personal hygiene practices among secondary school students in Enugu State?
2. What is the extent of practice of personal hygiene among secondary school students in Enugu State?

Method

Descriptive survey research design was used. The population for the study consisted of all public secondary school students in Enugu State. According to existing record there are 9900 secondary schools students in Enugu (PPSMB, 2023). The sampling size consisted of 495 secondary school students. According to Nwana (2010), if a population is in few hundred a 40% sample will be do and if many hundreds, 20% sample will do and if several thousand a 5% sample or less will be chosen. In view of the above principle, the population of the study runs in many thousand thus a 5% sample was employed to select the sample size. Thus, 495 students made up the sample for this study. The researcher used simple random sampling technique. The sample size of 495 was determined using 5%, this is because the entire population for the study was in many thousand. Ezinwa and Okoye (2015), opined that this sample technique is the fundamental sampling technique where we select a group of subjects for study from a larger population. Specifically the reliability coefficients obtained from data generated with Statistical Package for Social Sciences (SPSS) using Kuder Richardson formula and Cronbach's Alpha reliability for the internal consistency reliability, shows knowledge of personal hygiene (.85) and practice of personal hygiene (.79) respectively. Thus a questionnaire titled "Knowledge and Practice of Personal Hygiene Questionnaire (KPPHQ)" was used. Three experts validated it. The researcher administered the copies of questionnaire, with the help of three research assistants. The data collected were analyzed using frequency, percentage, mean and standard deviation. The questionnaire was rated on 4-point scale of very great extent (VGE), great extent (GE), low extent (LE) and very low extent (VLE). The decision rule was that any item that has 50% and above is regarded as knowledgeable (K) while items below 50% is regarded as not knowledgeable (NK). For the personal hygiene, any item mean from 2.50 above is regarded as high while item mean below 2.50 is regarded as low.

Results

The results of the study are presented based on the research questions that guide the study.
Research Question 1**:** What is the level of knowledge of personal hygiene practices among secondary school students in Enugu State?

Table 1: Percentage Response Score on the Knowledge of Personal Hygiene Practice Among Secondary School Students in Enugu State.

n= **490**

S/N	ITEMS: The following are students response regarding their knowledge towards practicing of personal hygiene	CORRECT		INCORRECT		DECI
		F	%	F	%	
1	I know how to take my bath twice daily	408	83.3	82	16.7	K
2	I know the essence of blushing my teeth twice daily	100	20.4	390	79.6	NK
3	I understand the health risk of sharing my underwear	300	61.2	190	38.8	K
4	I know the benefit of keeping my kitchen and food clean	407	83.1	83	16.9	K
5	**I know the consequence of putting sharp object in ear**	400	81.6	90	18.4	K
6	I know how to wash my hands with soap and water	390	79.6	100	20.4	K
7	My parents taught me personal hygiene practice	350	71.4	140	28.6	K
8	I know the essence of washing my cloths	405	82.7	85	17.3	K
9	My teacher taught me importance of hands washing	400	81.6	90	18.4	K
10	I know the essence of bathing with a clean water	200	40.8	290	59.2	NK
11	My teacher taught me personal hygiene practice	401	81.8	89	18.2	K
	Grand Percentage		**69.8%**		**30.2%**	K

Key: % = Percentage, F = Frequency, Deci = Decision, K= Knowledgeable and NK= Not Knowledgeable

In Table 1; it shows that majority of students answered correct on items 1 (83.3%), 4 (83.1%), 5 (81.6%), 8 (82.7%), 9 (81.6%), 11 (81.8%) 6 (79.6%), 7 (71.4%), and 3 (61.2%), as their knowledge regards to personal hygiene, while few of them answered incorrect on item 2 (20.4%) and 10 (40.8%). The grand percentage on correct being 69.8%, signifies that majority of secondary school students at Enugu State are knowledgeable on personal hygiene.

Research Question 2: What is the extent of practice of personal hygiene among secondary school students in Enugu State?

Table 2: Mean Distribution of Respondents on the Extent of Students Personal Hygiene Practice.

n= **490**

S/N	**ITEMS:** The following are students response regards their personal hygiene practice	**Mean $\overline{X}$**	**SD**	**Deci**
1	I always take my bath twice daily	3.80	0.50	High
2	I always blush my teeth twice daily	3.21	0.68	High
3	I does not share my underwear with my siblings	1.92	0.44	Low
4	I always keep my kitchen and food materials clean	3.64	1.85	High
5	**I do not put sharp object in my ear**	1.4	0.72	Low
6	I always wash my hands with soap and water	1.4	0.56	Low
7	I does not was my hands at all	1.3	0.51	Low
8	I always wash my cloths a day after wearing it	1.2	0.47	Low
9	I always wash my hands without soap	1.2	0.51	Low
10	I always bath with clean water	1.3	0.58	Low
11	I always cut my nails and hairs	1.0	0.61	Low
	Grand Mean	**2.0**	**0.68**	**Low**

Table 2 shows that items 1 to 11 which deals with students' response regards to their personal hygiene practice. Item 1 (3.80), 2 (3.21), and 4 (3.64) shows a high practice while item 5 (4.1), 6 (4.1), 7 (1.3), 3 (1.92), 8 (1.2), 9 (1.2), 10 (1.3) and 11 (1.0) shows a low practice of personal hygiene. The grand mean of 2.0 signifies that majority of students at Enugu State do not practice adequate personal hygiene.

Summary of the Findings

Based on the findings of the study, it can be deduced that: the.

1. Students are quite knowledgeable with regards to personal hygiene.
2. Students lack adequate personal hygiene practices.

Discussion of the Findings

The findings from the study are discussed in this section. Finding revealed that the students have high knowledge of personal hygiene. This finding is supported by the study carried out by WHO (2023), whom opines that having knowledge of personal hygiene may lead to regular hygienic practices which will positively enhance the state of health individually and the society at large, while poor knowledge of personal hygiene practice is a risk factor that may lead to increase in spread of communication diseases such as coronavirus, monkey pox, chicken pox and other related communicable diseases.

Therefore, students' knowledge regards to their personal hygiene, is quite encouraging because of its health benefit, while lack of knowledge regards to it might negatively influence the health state of the students. This previous study supported the current study because both pointed out that poor knowledge of personal hygiene practice affects an individual health.

The finding revealed that few students did not know the health benefit of regular tooth brushing and bathing with clean water. This study is not in line with the study of Erich and Thomas (2019), who see oral health as the health practice towards regular brushing of the teeth in order to prevent germs or tooth decay. Taken adequate care of the teeth such as brushing at least twice daily that is once in the morning and once before bedtime, using fluoride toothpaste and a toothbrush with soft flexible bristles, avoidance of sugary food and regularly teeth examination at hospital is quite essential. Because improper oral hygiene negatively lead to risk of cavities, teeth pains, swelling, bleeding gums, infection and loose teeth etc.

Further finding shows that students personal hygiene practice are on a low extent which was the reason why few students practice this item on a high extent. This study is supported by a study carried out by Beril, Füsun and Gülten (2017), on their previous report showed that 52.4% of visual-disabled women did not receive information about genital hygiene; 33.4% received information about menstrual hygiene; 34.6% received information about vaginal discharge; 38.1% had urinary tract infection; 79.8% did not go to a doctor periodically. This shows that, there are urgent need for adequate practicing of vagina health among women in order to curtail the prevalence of poor practice of unhealthy vagina hygienic practice. Their finding supported the current finding because they shows some of those essential component of the body where personal hygiene can take place.

Also finding shows that regular taking of bath, brushing of teeth twice daily and keeping the kitchen and food material clean, are one of the personal hygiene practices always carried out by few students. This finding is not in line with the finding of (Sekhon & Minhas, 2014; Center for Disease Control and Prevention, 2013; WHO 2009; Mohammed, 2015). Whom confirmed that, infectious diseases can easily be contracted among school children due to overcrowded environment and inappropriate poor personal hygiene practices of the students which poor practice of regular bathing as well as poor personal hygiene practice escalate the risk of infectious diseases and ill health.

Conclusion

Based on the findings, the study concluded that students are very knowledgeable of personal hygiene, but putting their knowledge into physical practice are seen as the major problems that most students face, which usually contribute to the risk of infectious diseases such as covid-19, genital infections, dental health challenges and diarrhea.

Recommendations

Based on the findings, the researcher recommends that:

1. Students' knowledge as it regards to personal hygiene practice should always be appraised by the classroom teacher, for the purpose of motivating those ones that have low knowledge of personal hygiene.
2. The school management should provide all the prerequisite personal hygiene materials for the facilitation of its practice.

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